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**MULTILOCLAR DISEASE OF THE LEFT OVARY.—EXTENSIVE
ADHESIONS.—OVARICTOMY.—DEATH FROM SHOCK.**

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CATHERINE W., aged forty-seven years, unmarried, was admitted to the Woman's Hospital August 23d, 1873, and gave the following history:

She commenced menstruating at the age of fourteen, and the function was regularly and painlessly performed down to the age of thirty-eight, when it ceased to recur with regularity. During the following year, the flow appeared only at intervals of two and three months. At thirty-nine it ceased, and was absent for three years, during which time her health was excellent. Nearly five years ago she had an attack of bilious fever, which lasted four weeks. This was followed by a sanguineous discharge, which seemed to her like menstruation. She saw no return of it,

however, until a year later, when a similar flow followed another attack of bilious fever. In the latter part of the year 1870, she had an illness which was pronounced congestion of the liver, during which she experienced pain along the edge of the ribs on the right side, extending over to the left, and also a pain which seemed to pass from the umbilicus through to the spine. At the same time, the abdomen increased in size, the enlargement being general, and not more in one part than another. This enlargement, and the pain in the hepatic region, lasted several weeks, and then together they passed slowly away. On the subsidence of the abdominal swelling, both her medical attendant and herself discovered a "cake-like"

tumor in the right ovarian region. It was "not round like an orange, but flattened, with uneven edges."

In February, 1872, she had another slight attack of fever, followed by several sanguineous discharges at irregular intervals, some of them lasting three or four days, and one of them a full week. Each of these hæmorrhages was preceded by pain, or rather a feeling of soreness, referred chiefly to the right ovarian region, and increased by certain movements of the body, as turning in bed, etc.

The tumor itself, although at times slightly tender under pressure, has never been the seat of pain.

Within the past eight months the abdomen has steadily and rapidly enlarged. In the latter part of last December she felt a good deal of soreness in the left side, followed by a sanguineous discharge, which was the last she has seen. Her health, latterly, has rapidly failed, and she has become very feeble. She has not been able to walk, both on account of debility and of a feeling of pressure about the left groin when she is on her feet. Her appetite, however, has been good; and her bowels have acted regularly.

Present Condition.—The patient is a tall woman, of large frame, but greatly emaciated. Her complexion is sallow; and her countenance presents the peculiar expression so frequently observed in persons with advanced disease of the ovaries, and which Mr. Spencer Wells has called the "*facies ovariana*." The tongue is clean and smooth; pulse 120, small, feeble, and regular. The feet and ankles are œdematous. Moderate exertion causes rapid breathing. The abdomen is very much enlarged,

measuring forty-five inches in circumference. The enlargement is not uniform, some portions being much more prominent than others. There is dullness on percussion everywhere except in a part of the right hypochondriac and right lumbar regions. Palpation shows the existence of an irregular tumor, extending from the brim of the pelvis to the ensiform cartilage, and passing under the edge of the left ribs, causing considerable bulging of the thorax on that side. On the right side it extends to a level with the edge of the false ribs. Over the right ovarian region there is a distinct roundish nodular projection, about the size of a cocoa-nut, which the patient identifies as the original tumor. To the left of it, and occupying a position near the median line of the body, are two smaller nodular projections. The great mass of the tumor, however, inclines to the left side. Fluctuation is evident, in varying degrees, in all parts of the tumor, and there is no tenderness in any part of it. The uterus is found to be normal as to position, size, and depth of cavity.

The diagnosis is multilocular disease of one or both ovaries.

The diagnosis having been subsequently confirmed by the other members of the hospital staff, and by Prof. J. W. Freer and Dr. Chas. G. Smith, of the Consulting Board, an operation was recommended as the only means of relief; and the patient, after being made fully aware of its dangerous character, and after consultation with her friends, decided to avail herself of this last resource.

Operation.—The patient having on the day previous been well purged by a full dose of castor-oil, and having

eaten nothing but milk-porridge for twenty-four hours, the operation was performed Sept. 16th, 1873. There were present Drs. V. L. Hurlbut, W. C. Lyman, Flood, Emmons, and Blake, of the Hospital Staff, and, by invitation, Drs. C. G. Smith, McKennan, Harvey, and Chapman (of Hudson, Mich.); also, Messrs. Chapman, Harrington, and Moore, medical students.

The patient was placed upon the operating-table at 11 A.M., and being fully anæsthetized by Dr. Flood (alternately by chloroform and sulphuric ether), an incision, commencing an inch and a half below the umbilicus, was made in the linea alba, and extended directly downward about four inches. The different layers of the abdominal wall were successively divided until the peritoneum was reached. The bleeding from the incision having been checked by the application of sponges dipped in cold water, the abdominal cavity was cautiously opened with the point of a bistoury, and exit given to a small quantity of ascitic fluid. The small opening into the peritoneum was then enlarged to an inch and a half by means of scissors, a grooved director being previously used as a guide. The cyst-wall, having a pale bluish color, then appeared, filling up the opening. A silver catheter, having a large curve, was next introduced, and swept over the anterior and lateral walls of the tumor, for the purpose of ascertaining the position and extent of any existing adhesions. These were found to be very numerous and firm on both sides, more especially on the left. The abdominal incision was now extended downwards to five and a half inches. Bathing my hands in

artificial serum, as first used and recommended by Dr. E. R. Peaslee,* I introduced the right and left successively, and separated all the parietal adhesions that could be reached. Many of these were very dense, and required much force for their rupture. The presenting portion of the cyst was then tapped with a large trocar, and about one pint of clear, amber-colored fluid escaped through the canula. In order to guard against the entrance of any of the cystic fluid into the peritoneal cavity, a piece of oiled silk was closely applied to the canula, and made to cover the lower portion of the incision. As the cyst collapsed, it was drawn through the opening, and other cysts were successively tapped by pushing the trocar through the canula, without withdrawing the latter. The fluid drawn from the different cysts varied greatly in color and consistence, as is usual in polycystic ovarian disease. The quantity of fluid removed in this manner did not exceed three or four pints; and its removal caused no sensible diminution in the size of the growth; I therefore removed the trocar, and, forcing the hand into the center of the tumor, broke down the intercystic septa in every direction. Even this procedure, however, failed to reduce its size sufficiently to enable me to draw it through the incision. This latter was, therefore, extended upward to the left of, and two

* Composed of chloride of sodium, four drachms; albumen (white of eggs), six drachms; water, four pints.

"It is intended to imitate the natural secretion of the peritoneum, and is kept at a blood-heat, and used to thoroughly moisten the operator's hands before they are introduced into the peritoneal cavity."—*Ovarian Tumors*, p. 402.

inches beyond, the umbilicus, and downward to within two inches of the symphysis pubis. The hand was then again introduced, and the surroundings of the tumor explored in every direction. Other adhesions were discovered and ruptured, and the tumor was then lifted from its bed and brought through the incision, this stage of the proceeding being greatly facilitated by turning the patient upon the left side. The tumor being held by assistants, the pedicle, consisting of the left broad ligament, was clamped as near the tumor as possible and divided. There were still several very strong bands of adhesion between the tumor and the pelvic walls. These were divided with scissors, and the tumor, being now wholly detached, was removed.

The right ovary was next examined, and found to be greatly atrophied, being no larger than a Lima bean. It was firm in texture, and whitish in color; it was undisturbed. The uterus was in all respects normal.

A good deal of blood was oozing from the torn and cut surfaces of the adhesions, and several minutes were consumed in checking it. The solution of the persulphate of iron was effectually used for this purpose in some parts, but in others it was found necessary to apply ligatures. The ends of these were, in all instances, cut off as closely as seemed consistent with safety.

The pedicle was next permanently treated. It was transfixed with a needle carrying a double ligature of well-waxed carbolized linen thread, tied in two parts, the ends of the ligatures cut off close, and the clamp removed.

As the patient began to exhibit signs of exhaustion, it was deemed prudent to hasten the remaining steps of the operation as much as possible. An india-rubber drainage-tube, one-fourth of an inch in diameter, perforated on alternate sides at intervals of half an inch, was passed from Douglas's cul-de-sac into the vagina. The end of the tube which was left in the abdomen was attached to a double silver wire, the free ends of which were twisted together and brought out through the lower angle of the incision. This step of the operation was accomplished as follows: A curved trocar and canula, guided by a finger, were passed into the posterior cul-de-sac of the vagina, and through the vaginal wall, the point of puncture and emergence being determined by pressure of a finger against the corresponding peritoneal surface immediately behind the uterus, a half inch from its vaginal attachment. The puncture having been made, the trocar was withdrawn. The lower end of the drainage-tube was then fastened to the abdominal end of the canula, and the latter withdrawn, carrying with it the tube through the vaginal canal.

The peritoneal cavity was then thoroughly cleansed, by means of carefully - prepared new sponges. This having been done, the wound was closed with thirteen silver-wire sutures, placed half an inch apart, each suture penetrating the entire thickness of the abdominal wall. A compress of folded flannel, wrung out of a warm, weak solution of carbolic acid, was laid over the incision, and over this a second larger compress, wet with hot water. A sufficient quantity of cotton-wool was placed

over the compress, to give some roundness to the now sunken abdomen, and this, in turn, was covered with a piece of oiled silk, the whole being finally secured in position by a flannel bandage passed around the body and pinned.

The time of the operation was one hour and forty minutes. Throughout the whole period the temperature of the room was kept at 76° to 80° , and the air was made moist by means of a large evaporating-dish filled with water and placed upon a stove.

The patient fully recovered from the influence of the anæsthetic; but so soon as she regained consciousness she complained of feeling tired. Her pulse was 120; respiration irregular and sighing. She took a half grain of sulphate of morphia, and had a tablespoonful of hot whisky-toddy every ten minutes. Hot blankets were laid over her, and india-rubber bags, filled with hot water, placed about her feet and legs. However, the pulse became more and more feeble, the breathing more irregular, and she expired in an hour and thirty minutes after the completion of the operation.

The weight of the tumor was thirty-five pounds.

Remarks.—An interesting fact in connection with the foregoing case was the discrepancy between its early history and the condition discovered at the time of operation. All the early symptoms pointed most unequivocally to the right ovary as the seat of disease, while the subsequent history developed the fact that they were really referable to the left.

Dr. W. L. Atlee* relates a case in

which there was likewise a contradiction between the early symptoms and the subsequent physical signs. At the time of the operation, "*the tumor was most developed towards the left side*, and the percussion sound was *dull over the left lumbar region*, and elsewhere, except in the epigastric, right hypochondriac, and *right lumbar regions*, where it was *resonant*." These peculiarities pointed to the left ovary as the one affected; but "about three years before the patient had an attack of severe pain in the *right groin and hip*. One year after, her friends noticed an enlargement of which she was not aware. It extended uniformly over the whole lower portion of the abdomen. Afterwards, she had returns of pain in the right inguinal region." In this case, the diagnosis of disease of the right ovary, the correctness of which was confirmed by the operation, was based upon the early history; the distinguished author holding that when "the history of the case shows that in the early development of the tumor it had appeared in one or other groin, or that severe pain, in either side, had accompanied its origin, the side on which the early difficulty existed will determine which ovary is affected."

The case of Miss W. shows, however, that such a rule of diagnosis is not always reliable. Here, not only was the symptom of pain in the right side, but the early development of the tumor, also, so far as it was recognized; and yet, only the left ovary was enlarged.

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* *Ovarian Tumors*, p. 45.

NOTES OF PROGRESS IN THE STUDY OF THE PATHOLOGY OF THE NERVOUS SYSTEM.

A PART OF THE ANNUAL REPORT OF THE SECTION ON PATHOLOGY, OF THE CHICAGO SOCIETY OF PHYSICIANS AND SURGEONS. PREPARED BY PLYM. S. HAYES, M.D.

PATHOLOGY OF THE PERIPHERAL NERVES.—M. Verneuil, in four articles (*Gazette Medicale de Paris*), gives the history, illustrated by cases, of what he terms traumatic herpes. This is a vesicular eruption, resembling in character herpes or zona. It is often spontaneous, or consecutive to an injury. He concludes that herpes may exist as an independent intercurrent affection during the evolution from an injury; and that it may also certainly result from the wound, and be really of traumatic origin. Three forms of traumatic herpes may be distinguished—peripheral, contiguous, and distant herpes. The disorder may follow a wound of a nerve track, a ganglion, or of the peripheral ends of the nerves. The herpes may relapse; it may coincide with erysipelas, and simulate the vesicular variety of that disease.

We learn from the *Medical Times and Gazette*, that Prof. Eberth, of Zurich, proposes a new explanation of the occurrence of inflammation of the cornea, dependent upon lesion of the fifth pair of nerves. He maintains that the trauma is the mediate, rather than the immediate, cause of the corneal inflammation. The pathological condition of the nerve induces changes in the eye favorable to the retention of bacteria in the cornea, and the subsequent formation of bac-

teric masses, and attendant inflammation.

The most superficial puncture of the affected spot causes a rapid extension of the disease. The occurrence of the keratitis is, however, dependent upon the degree and extent of the desiccation, the amount of protrusion, and the size of the ocular aperture.

Dr. Edward Hansen has published (in the *Hospitals-Tidende*) a paper on "Intermittent Neuralgic Vesicular Keratitis depending on Traumatic causes." This disease takes its origin from injury to the peripheral extremities of the nerves, probably those of the corneal epithelium. These nerves, undoubtedly, exercise an important influence on the vitality of the epithelial cells. The origin of this malady is always a wound, in the shape of a scraping of the epithelium.

Prof. Erasmus Wilson, in a course of six lectures on Dermatology (reported in the *Lancet*), mentions the following implications of the peripheral nerves in leprosy. The pathological complications in this disease were stated to be the development of a cachetic condition, attendant on a colloid metamorphosis infiltrating the tissues and causing their ultimate destruction. The colloid material is deposited in the skin, obliterating the papillary layer. The corium and connected structures, including vessels and nerves, are thus destroyed by

the infiltration of tubercular masses. This deposit invades the neurilemma, separates the tubules, and soon leads to their atrophy.

Dr. H. V. Carter, Bombay army, has given a more extended account, in an article on the pathology of leprosy of the nerve lesions due to this disease. This author concludes that there is, prior to the more visible changes of leprosy, a progressive impairment of the functions of the cutaneous nerves and branches. The structural alterations of the nerves he considers to be the characteristic lesion of leprosy. He agrees with Wilson, that the subsequent histological changes are due to the infiltration, or deposition, of morbid materials in the skin and subjacent tissues. This deposit appears in the nerves, between the nerve tubules, and within the sheath. The envelope of connective tissue of the nerves is hardly changed. This deposition continues until the tubules are separated, compressed, emptied of their contents, and eventually destroyed. The tactile corpuscles disappear before the other less sentient corpuscles. The brain and spinal cord are wholly free from such deposit. The cutaneous nerves are implicated, chiefly and primarily, in that part of their course between the deeper fascia and the limbs and trunk. When the deeper seated nerves are affected, it appears to be only in their sensory elements; and those nerves are involved which are in continuity with cutaneous nerves. Motor paralysis is seldom marked, even in those who have lost hands and feet by the disease.

The author considers that there are trophic nerves in connection with the sensory, and that, through these, nu-

trition may be affected directly by the nervous system. It is submitted that all of the essential phenomena of leprosy may be traced directly or remotely to the characteristic nerve lesion.

Vulpian (*Journal of Anatomy and Physiology*) demonstrates that the gray matter of the spinal cord, medulla oblongata, and the corresponding parts of the pons varolii, exert, through the nerves of motion, a trophic influence on the muscles, as well as on the nerves themselves. This is shown by the atrophy of muscles, when their motor nerves are severed and they are therefore no longer in contact with their trophic centers. This obtains even when the severed motor nerve contains no sympathetic fibres at the place of division. This shows that the trophic influence is carried to the muscles through their motor fibers. The muscles atrophy when the anterior horns of the gray substance of the spinal cord degenerate, and the sympathetic is not involved.

Drs. Bizzozero and Golgi (*Medizinische Jahrbucher*) briefly give a summary of the researches of Montegazza and Vulpian, as well as of the views of Fasce and Erb, on the changes that take place in muscles after the section of the nerve distributed to them. The remainder of the article is devoted to their own researches on the changes which take place in muscular tissue after section of nerves. Their principal experiment was that which occupied the longest time from the section of the nerve (sciatic) until the death of the rabbit (eleven months afterwards), and subsequent microscopical examination. "Microscopical investigation showed, in the

superficial muscles of the thigh, isolated rows of fat granules, which seemed to correspond to the course of the nerve fibers. In the deep-seated muscles of the thigh, the muscular fibers were found attenuated here and there; the transverse striæ were not well marked; and between the muscular bundles of the first and second order were seen numerous large zones of fat cells. At other parts, the muscular substance of single fibers was partly torn in pieces, and partly replaced by fat cells.

"The superficial muscles of the leg presented, very markedly, those appearances which are generally represented as the result of section of nerves; that is to say, multiplication of the nuclei of the muscle corpuscles, withering of the fibers, increase of the interstitial connective tissue, and profuse deposit of fat cells between the muscular fibers.

"In the deep-seated muscles of the lower extremity, which were yellow and lardaceous, no traces of muscular tissue could be found; it seemed to have been converted into fatty tissue, which resembled that of the panniculus adiposus. On transversal section, the fat cells presented round or irregular margins, and were arranged as in a mosaic. On longitudinal section, they were seen to be arranged in rows corresponding in direction to the fibres and muscles.

"In other investigations, of shorter duration, we met with fat cells only between the larger bundles. In one case, which had been observed for two months only, the fat cells were scattered between the bundles. In one case, observed for four months, we failed to find any trace of fatty deposit.

"These observations appear to us to be of some importance, as they indicate the causes of certain varieties in diseased conditions, as pseudo-hypertrophic paralysis, in the advanced stages of which the muscular fibres are found separated by fatty tissue."

Dr. Petrow (*Virchow's Arch.*) gives the following histological changes that take place in the nervous system of the great sympathetic, in cases of acquired constitutional syphilis: 1. Modifications of the protoplasm of nervous cells, which become loaded with brilliant pigmentary corpuscles, increasing with the age of the disease, and often accompanied by colloid transformation of the cells; the cells of the endothelium surrounding the nervous cells frequently undergo the same gelatiniform transformation, and cannot then be distinguished from the nervous cells. These changes can exist without the interstitial connective tissue being impaired. 2. Modifications of the interstitial connective tissue, with hyperplasia of the fibers, constituting large, irregular fasciculi, which push aside and compress the nervous cells and fibers. The cells are then atrophied, irregular, and dotted with pigment, whilst the fibers are flattened, and their myeline shows slight granulations.

The *Gazette Medicale de Paris* contains the summary of a case of injury of the sciatic nerve, followed by epilepsy. This is one of the few cases of injury to this nerve which has been reported as being followed by epilepsy. It is interesting, in view of Dr. Brown-Sequard's experiments on animals for the artificial production of epilepsy by severing the sciatic nerve. The outlines of the case are

follows: The patient, a soldier, received a gun-shot wound of the left thigh, Nov. 7th, 1870. The bullet, although visible, was so deeply imbedded that it could not be removed. In the course of six or seven months he began to have convulsive attacks, which were quite violent. The wound was then cicatrized, and the projectile could no longer be felt on palpation. These attacks then grew less and less frequent; but his health gradually began to fail. An operation was subsequently performed and the nerve exposed, and found surrounded by a cicatrix of connective tissue. Subsequent to this operation there have been none of the convulsive attacks.

Dr. Matthew Duncan (*Brit. Medical Jour.*) gives the details of a case of epilepsy produced by digital impression in the cranium of a fœtus during birth. The labor, a difficult one, occurred in a lady who had married late in life. Manipulation was required, and pressure made on the left parietal bone. The bone yielded to the pressure, and a digital impression was produced, which persisted, and was not entirely flattened out until two weeks after the birth of the child. On the third day after birth, the nurse noticed a twitching of the face and superior extremities. These gradually grew worse for about three weeks. The disease eventually yielded to treatment.

INTRASPINAL LESIONS.—The *British Medical Journal* contains a case reported by Dr. Nieden, of a traumatic lesion of the spinal cord, corresponding to the first and second dorsal vertebræ. The two lower extremities, and the trunk as high as the second intercostal space, were

paralyzed completely to motion and sensation. The temperature gradually fell from 95° to 80.6° F., when death occurred, ten days after the accident. During this time there were two periods of increment. The pulse and respirations bore an almost constant proportion to the diminution of temperature. The patient was conscious, even to the last.

The following salient points have been taken from an article on "Intraspinal Hæmorrhages," by P. Hayem (*Archives Generales de Medicine*). After dividing these hæmorrhages into extrameningeal, intrameningeal, and subarachnoid, he says that, of all, the extrameningeal is the most frequent. The blood may be effused the whole extent of the space between the spinal canal and dura mater. The clots vary much in size and consistence. The amount of effusion in this locality never seems to be sufficient to compress the cord. Interarachnoid hæmorrhage usually occupies the whole height of the membranes, and generally compresses the cord. The subarachnoid variety is very rare. After having pricked an intraspinal vein in a dog, he found the three varieties of hæmorrhage were produced—varieties which were met with simultaneously in the cases recorded. According to this author, spinal hæmorrhage has nothing parallel to cerebral hæmorrhage. In fact, spinal hæmorrhage is so generally accompanied by inflammation, that it might be properly termed hæmatomyelitis. At times the blood is contained in an anfractuous cavity; but more generally is it intimately mixed with nerve substance. The effusion occurs in the gray substance of the cord, the white portion interposing an insurmountable

ble barrier. In the great majority of cases, the disorganization of the gray substance is entirely out of proportion to the amount of hæmorrhage. The whole extent of the cord may be affected when the hæmorrhage is not more than a centimetre in breadth. At times, the hæmorrhagic centers may be disseminated throughout the extent of the cord. M. Lionville found, in the vessels, capillary aneurisms similar to those found in the brain. The vessels are usually thickened, and their sheaths enlarged, distended and filled with yellow, fatty granulations.

M. Rosenthal observes, that the chief pathologico-anatomical lesions that are met with after death in the spinal or essential palsy of children, are atrophy and malformation of the anterior cornua of the cord. According to this author, the changes observed in the cells of the gray substance are not the primary lesion. These changes depend, principally, on the enlargement and thickening of the blood-vessels observed by him. These changes in the blood-vessels antedate the destruction of the gray substance, and stand in the relation of cause to effect.

INTRACRANIAL LESIONS.—J. Lockhart Clark (*British Med. Jour.*) gives the details of a case of progressive muscular atrophy, accompanied by muscular rigidity and contraction of the joints, with *post-mortem* examination of the brain and spinal cord. The duration of the disease, from the first appearance of vertigo until death ensued, was twenty-eight years. The general history was that of a typical case. The examination showed that the cerebral convolutions were thickly interspersed with corpora amylacea,

and that many of the blood-cells of the white substance were enlarged. The cells of the gray substance were not altogether healthy. The pons varolii was below the average size. Its blood-vessels were somewhat dilated. In it the corpora amylacea were thickly interspersed. The medulla oblongata was about one-fifth below the average size. All its nuclei were smaller than normal, their cells having undergone a pigmentary degeneration. The spinal cord was one-fourth less than the natural size. In all of its parts the gray substance was in a pathological condition, from various lesions and degenerations. The nerve cells of the anterior gray substance throughout the length of the cord had undergone degeneration; some of the cells having undergone pigmentary degeneration, others having fallen into granular heaps. Of those that remained, their processes were either lost or reduced considerably in size.

M. Lionville relates (*Gaz. des Hôpitaux*) a case of complete paralysis, with only slight impairment of sensation. The patient was found on the street insensible. The urine was drawn off, and found loaded with albumen and sugar. There was no indication of Bright's disease. The necropsy showed that a large portion of the pons Varolii had been invaded by the hæmorrhage, and the upper part of the wall of the fourth ventricle was affected.

Zenker has, for several years past, devoted himself to the study of the pathogeny of spontaneous cerebral hæmorrhage. During this time, in every case that he has examined with sufficient care, he has found miliary aneurisms present, not only in the

neighborhood of the clot, but in other parts of the brain. All of the arterial coats bound these vascular dilations, thereby forming true aneurisms. The inner coat of the artery first becomes ruptured, thus creating a dissecting aneurism. This state of things may continue for some time. A retrograde action may be set up, so that nothing eventually remains but a little pigmentary tubercle. Lastly, the aneurismal wall may rupture, and give rise to cerebral hæmorrhage. So far do MM. Charcot and Bouchard, who first discovered the frequent presence and pathogenic influence of these aneurisms, agree with Zenker. As to the immediate cause of the formation of the aneurisms, they differ. Zenker claims that these capillary aneurisms are preceded, as all true aneurisms of the larger arteries are, by sclerosis of the inner tunic of the cerebral arterioles.

Even if miliary aneurisms can exist without change in the arteries at the base of the brain, microscopical investigations show that the arterial branches in the neighborhood of the aneurisms have undergone a change in their inner coats. This change consists of an irregular thickening and sclerosis, and sometimes fatty degeneration.

Dr. Lidell, in an article in the *American Journal of Medical Sciences*, has collected the histories of a number of cases of thrombosis of the cerebral arteries. After making remarks on each case, and dividing them into eight classes, he gives the etiology, anatomical appearances, symptoms, diagnosis, and treatment, of this disease.

In answer to the self-asked question, Does thrombosis ever begin in

the minute arteries of the brain, in old people? he replies that "there does not appear any good reason why thrombosis should not sometimes have its starting-point in the cerebral capillaries, as well as in the capillaries of the extremities of aged persons." The anatomical changes in the brain substance are due to anæmia, from the greatly diminished supply of nutrient blood. These changes consist in an exsanguinated appearance, and diminished consistence of the brain substance. Anæmia is not always present, for in some cases the portion of the brain implicated exhibits an undue congestion, the white substance, when cut, becoming quickly bedewed with blood. The author thinks that want of exsanguination has its origin in the vaso-motor paralysis, and dilation of the cerebral vessels, a state which preceded and determined the thrombosis. The softening of the brain substance is strictly a necrosis, analogous to gangrene in the extremities.

The reason assigned for the brain not exhaling a gangrenous odor, is because of its complete exclusion from the air. The necrosed portion varies in size from that of a bean to a goose's egg. There was found, on microscopical examination of the necrosed substance, only the remains of nerve filaments, granular cells that have undergone fatty degeneration, and masses of detritus. There were no granule cells or granular masses, such as are found in softening from exudation. Should collateral circulation be soon established, the anæmia is in a measure removed, the paralyzed limbs regain their lost functions, and the other signs of cerebral disturbance pass away. Even

after collateral circulation has been established, and the paralysis and brain symptoms abated in a measure, the cerebral lesion may be sufficient to produce death.

Dr. L. Waldenburg reports a case of congenital aphasia. The child at the time of the report was six years old. The mother had an attack of right hemiplegia, accompanied by aphasia, when three months pregnant. The child was born at term, with the symptoms of right hemiplegia. He has recovered almost entirely from the effects of the paralysis; is not deaf, and is quite intelligent. The examination of his mouth and vocal organs was negative, rather than positive, in affording an explanation of the cause. He never tries to produce articulate sounds. The Doctor thinks this case tends to disprove that both cerebral hemispheres are capable of educated speech.

Dr. J. L. Smith, in an article in the *American Journal of Medical Sciences*, gives the necropsy of seventy-six cases of cerebro-spinal fever. The following is a condensed statement of some of the most important pathologico-anatomical facts that he has stated in his conclusions. The amount of fibrin in the blood is increased, in cases that are not speedily fatal. In those who die in the stage of acute inflammatory congestion, the cranial sinuses are found engorged with blood, and contain soft, dark clots. In those cases which end fatally in a few hours, there is usually no other lesion than a hyperæmia of the meninges. In cases of longer duration, there is an exudation of serum and fibrin from the vessels into the meshes of the pia mater, and over

the surface of the brain beneath this membrane. Pus cells are mixed with the fibrin. At times the pus cells are so few as to be discovered only by the microscope; at other times the pus is in excess of the fibrin, and is readily detected by the unaided eye. The arachnoid loses its transparency and polish, and presents a cloudy appearance over a greater or less extent of its surface. The exudation of serum, fibrin and pus is more abundant in the spaces around the course of the vessels, over and around the optic commissure, the pons Varolii, the cerebellum, medulla oblongata, and the Sylvian fissures.

The quantity of serous exudation varies greatly with the case. If this exudation is of considerable quantity, the convolutions may be flattened, and the amount of blood circulating in the brain be less than normal. Cerebral softening occurs in certain cases. This softening is usually local, rather than general. The ventricles contain, in some cases, serum alone; in others, the serum is turbid, containing flocculi of fibrin, or fibrin and pus. In advanced cases, with abatement of the inflammation, the serum is obviously first absorbed, while the fibrin and pus are more slowly removed by fatty degeneration, and liquefaction. The author thinks that the remains of the fibrinous exudation may be found in persons who have recovered from this disease, although he has not verified this statement by *post-mortem* examination. The changes that take place in the spinal cord and membranes are similar to those found in the brain and its membranes.

LUPUS. — FISTULA IN ANO.

SUBSTANCE OF A CLINIC BY PROF. E. ANDREWS, M.D., IN MERCY HOSPITAL,
MAY 4TH, 1874. REPORTED BY J. R. KEWLEY.

GENTLEMEN: To-day we have, as you see, a patient afflicted with lupus. We propose to cure him, if possible, by an operation. This disease is one whose exact nature is not very well understood by pathologists, owing to the fact, I think, that the term "lupus" is applied to really different diseases. True lupus strongly resembles cancer (after ulceration), both to the unaided eye, and by the examination of the morbid tissues by the microscope. However, if a cancerous ulcer exists, the surrounding lymphatics are generally enlarged. Not so with lupus: the lymphatics remain normal and healthy.

Lupus begins as a small ulcer, with a thickened, ragged edge, rapidly spreading. In this case, we see it has encroached upon the nose, upper lip, and quite a large portion of the cheek, and has partially destroyed the left superior maxillary bone. Local treatment must be pursued, constitutional measures being wholly insufficient in all these cases. The ulcer is sometimes cauterized. In London I saw it so treated, with a red-hot iron, by the surgeons of that city.

Some German surgeons recommend the scraping away of all the morbid tissue that is possible, by means of some blunt instrument, and then hacking with numerous minute scarifications, and, after this operation, cauterizing the parts with fuming nitric acid. This stops the spreading

of the disease; and soon it is superseded by a healthy ulcer, with healthy granulations, which goes on until our labors are crowned by seeing a perfect cicatrix. Sometimes, however, such is not the case, and then the operation must be repeated. In this operation I always try and remove all the morbid parts, although the ulcer's center may not present a lupoid character.

The patient, an elderly gentleman, being now fully under the influence of sulphuric ether, the Professor proceeded to operate according to the German method described above, removing, during the operation, some small spiculæ of bone from the superior maxillary. The disease, as was feared, extended somewhat into the air-passages.

Gentlemen: I will now call your attention to this colored man, of middle-age, suffering from fistula in ano. These fistulæ are generally caused by a small abscess in the areolar tissue around the rectum. This abscess first breaks into the bowel, and afterwards, working its way through the tissues, opens upon the external surface, thus producing a communication between the bowel and the outer world, different from that which nature decreed. The opening thus established is prevented from healing by the irritation of foreign material seeking to find an exit through it. Some of our medical brethren object to an opera-

tion on fistulous patients of consumptive tendencies, on the ground that, after the operation, the tubercular disease is more rapidly developed. This opinion is not conclusively proven, by any means; yet there may be truth in it; and I would not operate on consumptive patients.

In this patient, as you see, there is a perfect net-work of external openings. By introducing a probe into this large opening on the left side of the anus, and a finger into the rectum, I can ascertain the locality of the internal opening into the bowel. Also on the right side, where we have a large fistula. In this one I find that, instead of opening directly into the rectum (as the one on the left side did), the probe runs behind the anus, into the fistulæ of the opposite side.

Introducing a grooved director into the larger of the fistulæ of the left side, as a guide to my bistoury, I cut through the tissues and the walls of the rectum into that organ, not sparing the sphincter muscles. Now, on the right side, as the principal fis-

tula does not open into the rectum, we will introduce the bistoury on the grooved director, and cut down behind the rectum, terminating in the incision of the left side, thus severing the sphincter muscles but once, which will add much to their future strength. You will observe that the incisions on the opposite sides are made in such a manner that if any cicatricial contraction takes place in healing, the anus will not be held open by the traction of two cicatrices in opposite directions, as might be the case if I cut the sphincters through upon both sides.

Now, we will open some of these smaller fistulæ into the main and connected incisions already made, and afterwards prevent union by first intention, by introducing into the incision some lint covered with cerate. We expect to see healthy granulations appear in the bottom of these incisions, which will continue to develop from the bottom in this way until a complete cicatrice is formed.

Editorial Department.

ILLINOIS STATE MEDICAL SOCIETY.—The Committee of Arrangements have not been able to secure any reliable arrangement with the several Railroad Companies for reduction of fare, either to or from the place of meeting. Neither is it practicable to secure any arrangements with the leading hotels for reduction of the

ordinary rates of board for members attending the meetings of the Society. All propositions looking to this end involve the condition that the Committee pledge the stopping of a certain *number* at a given house. The leading first-class hotels, the Grand Pacific, the Tremont, and the Sherman, charge \$4.50 per day; the

Palmer, from \$3.00 to \$5.00 per day, according to room. Among the more moderate-priced houses, the Commercial, corner of Lake and Dearborn streets, \$2.50 per day, is good; also, the Briggs, corner of Randolph and Wells streets; the Matteson, corner of Wabash ave. and Quincy street, and the Clifton, corner of Wabash ave. and Monroe street. Members from other parts of the State may be assured that they will meet a cordial reception from the profession in the city.

The Sessions of the Society will be held in the Lecture-room of the Academy of Science, 253 Wabash avenue, near Van Buren street.

AMERICAN MEDICAL ASSOCIATION.

—Let none of our readers forget that this Association meets this year in Detroit, on Tuesday, June 2d, 1874. We understand that all necessary efforts are being made to have the coming meeting an important and profitable one. The amendments to the Constitution and By-Laws, made last year, providing for a permanent Judicial Counsel, and the presentation of reports or addresses on the different departments of medicine by the Chairmen of Sections, will add very much to the interest and value of the

work, both in the General Sessions and Sections. It is to be hoped that a full representation will be present from all sections of the country.

PLAGIARISMS.—The criticism of "Curette," in THE EXAMINER of April 15th, has called out a reply, covering nearly twenty pages of manuscript, in which the writer attempts to show, what no one disputes, namely, that Buckle, in his History of Civilization, uses a great variety of facts that are common property for all writers, and quotes from a great many authors, which he fully acknowledges in a full list, and in marginal notes. But all this does not touch the question raised by "Curette," in his letter to THE EXAMINER. That question was, simply, whether the address on "Organic Reform," in the Transactions of the Illinois State Medical Society, contained *verbatim* quotations to the extent of whole paragraphs, from Buckle's History, without any credit or acknowledgment therefor? If so, it constitutes what is generally called *Plagiarism*. But as the twenty pages of manuscript sent to us, do not touch this question in any way, we can hardly afford the space to publish it.

"ABLY EDITED."—We observe that the *New York Medical Journal*, in its advertisements now appearing in the newspapers, makes a great point of recommending itself to the profession by stating that it is *ably edited* by Drs. Lusk and Hunter. We agree

with Drs. Lusk and Hunter, that they are able editors, but it is not generally considered necessary to tell the world what the world ought to know without blasts from one's own trumpet.—*London Medical Press and Circular*.

Society Reports.

TRANSACTIONS CHICAGO MEDICAL SOCIETY.

Reported by Will. T. Montgomery.

REGULAR semi-monthly meeting, May 4th, in the parlor of the Gault House. President Wm. E. Quine in the Chair.

Order for the meeting: Reports of Cases and Exhibition of Pathological Specimens.

The President reported a case of puerperal septicemia, that had occurred in Cook County Hospital during the prevalence of puerperal fever, which seemed to afford striking evidence of the utility of local medication in the disorder.

The patient, a primipara, aged twenty, was delivered after a quick and easy labor—which resulted, however, in bad laceration of the perineum—of a healthy male child, weighing eight and a half pounds. The uterus did not contract very firmly, though an unusual amount of blood was not lost; and the after-pains were not severe. On the second day after delivery, a copious secretion of milk was established, and the lochia was profuse, sanguinolent, and without offensive odor. In the evening, castor oil was given by the nurse without orders from the physician. On the third day the patient seemed bright, vivacious, and cheerful. She had had several movements of the bowels, and complained of nothing but intense pain in the forehead. Her eyes were red, as though she had been weeping; the pupils con-

tracted; tongue coated with a creamy fur; pulse 132, small and soft; respirations 36; temperature 104°; no pain in any part of abdomen, and no gaseous distension; uterus high and flabby; lochia, dark brown, very profuse, and insupportably fetid; urine, of normal character and quantity, though it had to be drawn off. During the day she experienced a succession of rigors, which were soon followed by increased acceleration of the pulse, elevation of the temperature, and profuse sweating. Two grains of quinine and one grain of opium were directed to be given every three hours; sponge-baths twice a day, and an intra-uterine bath of an aqueous solution of permanganate of potassium three times a day. The last-named procedure was conducted in the following manner: The patient having been placed on a bed-pan, the disinfecting solution, strength one grain to one drachm, to the amount of a pint, was allowed to flow into and out of the uterus through a double canula catheter, from an ordinary nasal douche apparatus. No pain was complained of by the patient from the application. When the first application was made, on the third day after confinement, the pulse was 132; on the fourth day it was 128; on the fifth, 120; on the sixth, 118; on the seventh, 92; on the eighth, 82;—the observations being

made at the same time of day. The pulse invariably fell from five to fifteen beats within two hours after the injections, though it quickly rose again, but only once, above the original frequency. On the fifth day, the patient seemed dull and listless; had no pain, and complained only of a feeling of soreness when pressure was made in right iliac region; diarrhœa and profuse sweating; her tongue was coated posteriorly with a creamy fur, while the tip and edges were very red and the papillæ prominent; the abdominal walls flaccid; gurgling in right iliac region; the uterus lower and firmer than before; the lochia abundant still, but much less offensive; urine normal in quantity. The previous prescription was now discontinued, and fifteen drops of turpentine, in emulsion, was directed to be given every four hours alternately with two grains of quinine and four drops of acid. hydrochlor. The patient being unable to retain either of the mixtures, they were omitted, and pills of two grains of quinine, one-sixth grain of morphine, and one-sixtieth grain of strichnine, were given every three hours. There was an abatement of all the symptoms corresponding with the decline in the frequency of the pulse, and improvement in character of lochia. On the eighth day the patient felt quite well and strongly desired food, though there was incomplete involution of the uterus. The case presented two points of interest: it was one of pure, uncomplicated septicemia, and was unquestionably influenced more favorably by local than internal medication.

In the discussion of the case, Vice-President Dr. Paoli said he had found the solution of permangan. pot. a very

excellent one to use as an injection in offensive uterine discharges. He referred to the fact that uterine injections are condemned by most authors on account of sometimes producing uterine colic. He thought it very difficult to distinguish between puerperal septicemia and puerperal fever.

Dr. Peterson said the amount of force used in giving uterine injections had much to do with producing colic, and that the solution should be passed in very gently.

Dr. Stillians said he had experienced very satisfactory results from the use of uterine injections by means of the double canula, and thought there was no danger of producing uterine colic when it was used.

The President explained that uterine injections had not been given—only uterine baths. He agreed with Dr. Paoli as to the difficulty of distinguishing between the various affections included under the head of puerperal fever. The latter term is used generically: in one instance applied to septicemia, in another to phlebitis, or lymphangitis; in others to cellulitis, metritis, peritonitis, etc. It was not ordinarily difficult to tell when any one or more of these morbid states existed; generally several of them co-existed. The speaker then detailed the points of difference between the various disorders named, which would serve in establishing a diagnosis. In alluding to the etiology of puerperal fever, he said that, while it occurred spontaneously and sporadically, there is a specific and infectious puerperal poison, which is not contagious, however, in the sense that the poison of variola is; the puerperal poison may give rise to one or more of several widely different morbid

states, all of which, however, are included under the head of puerperal fever. One patient may contract a metro-peritonitis, or septicemia, or a cellulitis, from another who has neither of the disorders mentioned, but some other form of the disease. A patient may even contract a fatal puerperal fever from one laboring under any of the ordinary infectious diseases.

NEW MEDICAL SOCIETY. — According to previous notice, quite a respectable number of physicians from the counties of Montgomery, Christian, Shelby, Fayette and Marion, met in the city of Pana, on the 28th ultimo, and organized "THE DISTRICT MEDICAL SOCIETY OF CENTRAL ILLINOIS," by adopting a Constitution and By-Laws, and electing the following officers:

President—H. H. Hood, of Taylorville.

Vice-Presidents—I. W. Fink, of Hillsboro, and H. H. Deming, of Pana.

Treasurer—L. B. Slater, of Taylorville.

Secretary—E. E. Waggoner, of Shelbyville.

C. V. Rockwell, of Taylorville, and J. D. Bennett, of Assumption, were appointed delegates to represent this Society at the next meeting of the State Medical Society.

C. V. Rockwell, of Taylorville, and R. E. Beach, of Patoka, were appointed delegates to the next meeting of the National Medical Association.

After the organization was completed, the remainder of the day was spent in an irregular, free-and-easy interchange of thought upon various topics of interest to the profession.

Having a membership of *thirty-one*, and an unmistakable promise of a bright and glorious future, "The District Medical Society of Central Illinois" adjourned at nine o'clock P. M., to meet again on the second Tuesday in July next.

Yours truly,

E. E. WAGGONER, Sec'y.
Shelbyville, Ill., May 5, 1874.

Microscopical Memoranda.

COLLATED BY LESTER CURTIS, M.D.

ON THE LEUCOCYTE AND PUS CORPUSCLE.—The *Philadelphia Medical Times* of March 28th contains a report of the proceedings of the Philadelphia Pathological Society, from which we quote the following:

"Dr. Bertolet said he had not a clear idea of what was comprised by

the term "*leucocytes*," and desired much to know its limitations.

"Dr. Tyson replied that, after other better-known histologists, he had always used the word *leucocyte* in a generic sense, as including all that class of small, round, variously granular cells which, according to the situations in which they were found,

were variously called white blood-corpuscles, mucus-corpuscles, young pus-corpuscles, or the round cells of connective tissue,—in other words, *dead amœboid cells*.

"Dr. Bertolet said he thought this was an error in theory which had been allowed to supplant practice; that the white corpuscle and pus-corpuscle were not the same.

"Dr. Richardson said the word *leucocyte* had been originally introduced by Charles Robin, who applied it to the class of bodies named by Dr. Tyson, whether alive or dead, as well as to exudation-corpuscles, and he believed also, provisionally, salivary corpuscles. He thought that if any one would treat white corpuscles contained in a drop of blood from his finger, first with water by introducing a small quantity at the edge of the thin glass cover, and then with weak aniline solution, in the manner described in his report on the white blood-corpuscle (*Amer. Med. Assoc. Trans.*, 1872), he would have no difficulty in finding many globules which exhibited two or three, and occasionally those which displayed four or five, well-formed and strongly-tinted nuclei, and which manifested a precise identity, in that respect at least, with the leucocytes of pus, as described by older pathologists. By this experiment it was easily demonstrated that the characteristic formerly so much relied upon for the recognition of the pus-cell, and quoted by Dr. Bertolet,—namely, that it possessed two, three, or more nuclei,—was valueless as a means for its discrimination from the leucocytes of blood.

"Dr. Tyson admitted that pus-corpuscles soon became very granular from fatty degeneration, and then presented objects which did not so closely resemble the white blood-corpuscle; but in their young state he did not think they could be distinguished, and to acetic acid and water both responded identically.

"Dr. Richardson said that about one white corpuscle out of thirty is ordinarily more granular than its com-

panions, and he was strongly inclined to think that these white corpuscles were also the seat of fatty degeneration.

"The President said it was very important to have clear ideas as to the exact application of terms. He presumed, of course, that this discussion referred simply to the morphology, and not the vital properties or developmental tendencies, of the cells in question. He said that he himself had been called upon to study cases where inflammation had obliterated the trunks of vessels,—a matter which brought up directly the question of being able to distinguish between the corpuscles in the surrounding inflamed tissue and the white corpuscles which remained in the softened clots. By no means which were available could he distinguish between the two.

"Dr. Richardson thought the more he studied the subject in connection with Cohnheim's observations, the more he was led to conclude that *living leucocytes of pus and blood were identical physiologically as well as morphologically*."

The italics are our own.

BLUE PUS.—It is well known that pus, and the dressings of neglected wounds, sometimes show a blue color. The *American Journal of the Medical Sciences* contains an article on this subject condensed from the *Medical Times and Gazette*, and one from the *Archives Gen. de Med.* This blue color of pus may become epidemic, as was the case in M. Gosselin's wards in the Charité at Paris. Cases are also on record in which the normal secretions, as sweat, milk, and urine, have been of this color. Two sources for the color are indicated: one, the hæmoglobin; the other, the indican of the urine. Hæmoglobin, effused, assumes the varying colors seen in a bruise; in an old clot it becomes hæmatoidin, identical with the red coloring matter of the bile. The action of nitric acid, which is a process of oxidation, produces a blue tint in the bile. Perhaps a similar

oxidation of hæmoglobin gives rise to the blue of the secretion, or the pus.

Various theories have been advanced to explain the blue coloring of the dressing of wounds. One, favored by Lucke, is that it is due to vibrios. [Our readers will bear in mind the theory that all decomposition is caused by fungi, or other microscopic organisms.] This theory of the vibrios would explain the epidemics, if we might so call them, which occur where there is a neglect of cleanliness, and in hot, moist weather.

A blue coloring matter, called pyocyanine, has been isolated from blue pus, which resembles indican, a blue coloring matter, occurring as a normal constituent of urine, and probably of the blood also. This indican may be the source of the blue color of the pus and secretion.

The Archives de Med. considers the blue color to be of three kinds: 1st. The coloration resulting from the modification of certain humors—or true blue coloration; 2d. Coloration due to fungi—false blue coloration; 3d. Coloration due to a substance still unknown—false blue suppuration. The name *cyanchrose* is proposed for the last. It commences and ceases suddenly, not only where there is a wound, but where the parts are sound. Its duration is variable. It produces no modification in the local condition of the wound, or the general health of the patient. Its progress is similar to that of erysipelas. It is sometimes epidemic. It occurs most frequently when the atmosphere is moist and warm and con-

tains ozone, and during storms. Its presence is a favorable prognostic.

ORIGIN OF PUS CORPUSCLES IN INFLAMED CORNEA.—Prof. A. Bottcher contributes a paper on this subject to *Virchow's Archiv*. It is well known that Conheim maintains that traumatic keratitis always begins at the periphery of the cornea, and extends inwards, and that the corneal corpuscles are unaltered; in other words, that the pus corpuscles in keratitis come from the white corpuscles of the blood. Bottcher, after numerous experiments, obtains results differing from this. By touching the cornea with a point of chloride of zinc, moderated with nitrate of potash, he is able to produce a limited keratitis without any hazy zone at the margin, and has found, also, that the corneal corpuscles are always modified.—*Lancet*.

HISTOLOGY OF THE SUDORIPAROUS GLANDS.—M. Krause (*Centralblatt*, No. 52, 1873) states that the sudoriparous glands of the palm and scalp have a single layer of columnar epithelium lining them throughout. To show this, he treats the skin successively with chromic acid, alcohol, and hæmatoxylin; and then makes sections. His hæmatoxylin is composed of decoction of logwood, 30 to 60 parts; alum, 5; chromate of potash, 0.1; creosote, 0.2; filter. He mounts his sections by using, first, absolute alcohol, then oil of cloves, then Canada balsam dissolved in chloroform.—*Lancet*.

A STORY is related of a Chicago physician, who is also an extensive real estate operator, that recently he prescribed some pills for a lady, at a time when he was very much absorbed in one of his land transactions. She

asked how they were to be taken. "A quarter down," said the doctor, "and the balance in one, two and three years."—*Philadelphia Med. and Surg. Reporter*.

Gleanings from Our Exchanges.

INSULATION IN THE TREATMENT OF RHEUMATISM AND OTHER DISEASES.

By P. M. WAGENHATS, M.D., LANCASTER, OHIO.

From The Clinic.

IN the causation of disease we have closely established the relation of heat to the fluxes of the bowels. When ozone is in abundance in the atmosphere, we have learned to expect influenza and affections of the mucous membrane of the respiratory tract. We trace typhoid fever to the infection of potable water by sewerage; and we have seen scarlet fever follow the milkman's cart, and with the pabulum of life sow the seeds of death.

Rheumatism, asthma, and malarial fevers, have an acknowledged dependence upon the atmosphere as to temperature, — barometric pressure, and the presence of that tertium quid, vaguely called miasm. Electric tension has also its influence, which all, sick and well, recognize in their own persons. So, also, that material manifestation of force we know as magnetism, has, in all probability, a powerful influence in the causation of disease. Concerning this we have very few observations recorded. The field of research has rapidly enlarged as to its production of currents, etc., but it has never been studied as the cause of disease.

Whilst innumerable observations are on record as to its powers as a therapeutic agent, I have no theory to offer as to the *modus operandi* of the treatment to be detailed in the subsequent part of this article, but offer it as the truthful record of what is at present a limited experience, in hope that observations on this subject

may be multiplied, and the facts lying in this direction may be studied.

On December 25, 1871, I was attacked with rheumatism of the ankle and the knee joints in one limb, then the other. I treated myself actively by alkalies, opiates, etc., in the ordinary manner recognized as of the most value in this disease. I was unable to leave my bed for three months, could not walk until April, 1872, and did not fully recover until the warm weather of June. On the 16th day of December, 1872, I was again assailed by my tormentor; treated myself as before, and "I thought myself happy" that I was able to be out of my room in eight weeks, privileged to hobble around the streets of our city with the aid of a cane. Warm weather again restored me to health, and during last summer and this winter I attended to my professional duties. On February 16, 1874, while congratulating myself that I should escape my annual attack, I was suddenly seized in the nighttime with severe pains in both ankles. In the morning I failed, after an ardent effort, to leave my bed. Fever was intense, as also the swelling of ankle and knee joints. A sense of coldness of the lower extremities existed, which was even more distressing than the pain caused by the swelling of the joints. This condition continued until the morning of the 18th. From the 16th to 18th I was unable to sleep. On the morning of the 18th I insulated my bed, by

causing the legs of the bedstead to be placed in four glass tumblers. In four hours thereafter the harrowing sense of coldness disappeared, yet the pain still continued. A sense of warmth and perspiration set in, and that night, at ten o'clock, I fell into a profound sleep, waking in the morning of the 19th bathed in a profuse warm perspiration, without the aid of diaphoretics or anodynes.

I steadily improved, and in a few days was out of my room. On February 23d, I left home for Cincinnati, where I remained a week, during all of which time I felt neither pain or soreness in the articulations. I returned to my home on Saturday, and found next morning the disease returned. I at once insulated my bed, and in eight days was able to go to my office and engage in my professional duties.

George C—, age sixteen, during the autumn of 1873, had an attack of rheumatism, affecting nearly every joint in the body, and affecting the mitral valves of the heart. In the latter part of January, 1874, he was able to resume his labors. March 8th he had a relapse. I treated him in the usual way, without sensible improvement. I then concluded to try insulation, which I was slow to do in any case save my own, because it seemed whimsical. In six days after instituting insulation he left his bed, and was able to make a journey of eighteen miles, which he did without discomfort.

Mrs. —, for eighteen years a sufferer from asthma, which occurred every month, without obvious connection with the menstrual function. During the cold months of the year she suffers almost continually. She had a severe attack in March, of this year, and in casting around for some *new* remedy, I concluded to insulate her bed. She was relieved in a short time, and since then, for more than a month, she has slept uninterruptedly upon the insulated bed, and has had no attack since.

I am aware that "one swallow does not make a summer;" and so small a

number of observations does not establish the value of any form of treatment; yet, when I was so speedily relieved when I expected to follow the old course, I think there is value in it, and report these cases, promising another installment, for I have several under treatment.

ARTIFICIAL REST IN PLEURISY.—

Dr. Roberts says, in the *Practitioner*: In the *early* stage of the disease I would strongly recommend that a trial should be given to the plan of *mechanically fixing the entire side* by one of the methods to be now described. In order to be of any use it should be done effectually, so as to restrain the movements as much as possible, and the sooner the application is made, the more likely is it to be of service. The plan I originally adopted was the following: Strips of adhesive plaster, from four to five inches wide, were fixed at one end, close to the spine, and then drawn tightly round the side, as far as the middle line in front, the patient being directed to expire deeply. In this manner the whole side was included, commencing from below and proceeding upward, each succeeding strip partially overlapping the one below. One was also fixed over the shoulder. Over this layer of plaster strips of bandage of the same width were fixed in like manner, having been previously dipped in a mixture of mucilage and chalk, such as is used in the treatment of fractures. Two or three layers of these were laid on, and then heated sand-bags applied, in order to dry the application as soon as possible. This is a most effectual mode of fixing one side of the chest, while it leaves the other quite free to act; and I would, by the way, commend it to those who are called upon to treat fractured ribs. The plaster adheres firmly to the skin, and the bandages adhere to the plaster, a firm casing being formed which will remain on any length of time. With regard to pleurisy, however, I have since then adopted another plan, which, so far as the disease is con-

cerned, seems sufficiently efficacious. It is merely to use strips of plaster, putting on two or three layers in the following manner: The first strip is laid on obliquely in the *direction of the ribs*, the second *across the course of the ribs*, the third in the direction of the first, about half overlapping it, the fourth the same as the second, and so on until the entire side is covered. A strip is also passed over the shoulder, which is kept down by another fixed round the side across its ends. Now it is difficult positively to prove that this treatment actually checks the course of pleurisy; but, taking a common sense view of the matter, it is not improbable that such a result is anticipated; and, from my own experience, I have not the slightest doubt but that it is brought about. I have carried it out now in a good number of cases, and in all the course and termination have been most satisfactory, while relief to the pain and other distressing symptoms has been generally immediate. I feel convinced, also, that in many of those cases of extensive pleuritic effusion which come under observation, the accumulation might have been prevented or moderated had this plan of treatment been adopted at an early period.—*Philadelphia Med. and Surg. Reporter.*

TOLERANCE OF THE HEART TO TRAUMA.—The following case, translated from the *Gazette des Hopitaux*, we clip from *The Clinic* of May 2d:

An old soldier was received during the early part of March, in the Hotel-Dieu, service of Richet, a few moments after an attempt at suicide. He had discharged a revolver upon the region of the heart. The ball entered below the left nipple, and did not escape, but made a track behind, by the side of the vertebral column, where it seemed to be lodged. The wound occasioned very little inconvenience and almost no dyspnoea. So little was his distress that the internes believed that the ball had

not penetrated, but had simply traversed the circumference of the thoracic cavity. A careful examination, with the *esprit* of M. Richet, led to a contrary conviction. He recognized, in fine, by percussion, practiced with great caution, dullness at the presumed level of the projectile. The summit of the left lung yielded a tympanitic resonance, and the ear applied to the chest perceived coarse mucous rales with the metallic bruit. Finally, there supervened some expectoration of pure blood, which could leave no doubt of the affection of the lung. The lung had been thus traversed, and there was left, most probably, hæmato-pneumo-thorax.

As to the heart, it beat with its ordinary regularity. Nevertheless, M. Richet believed that he must maintain reserve as to a possible lesion of this organ, the orifice of the entry of the ball being at the level of the apex.

M. Richet prescribed blood-letting copiously, *coup sur coup*, iced drinks, and internal hæmostatics.

On the next morning the patient was seized with an attack of cough, which was followed by a sharp hæmorrhage from the wound. With every movement of inspiration and expiration, there escaped a considerable quantity of frothy blood, with the bubbling discharge of air. At the same time there developed emphysema of all the upper parts of the body. The heart remained always regular, as if impassive, as also the pulse. Death followed in the afternoon from the continued hæmorrhage which nothing could arrest.

At the autopsy was recognized a fracture of the rib at the level of the entrance of the ball. The path of the ball traversed the pleura and the pericardium successively at the level of the apex of the heart, which was the seat of a small contused wound. About a table-spoonfull of clotted blood laid in the pericardium. About the wound could be seen the traces of an extensive contusion of the surface of the heart, produced, without doubt,

by friction against the fragments of the rib. The left inferior lobe of the lung was traversed in its whole extent.

OBITUARY.—In Wiesbaden, Feb. 19, 1874, of apoplexy, in his 65th year, Dr. Karl Ernst Bock, Professor of Pathological Anatomy at Leipsic, for years associate editor of *Schmidt's Jahrbucher*, and during his whole life a most zealous worker in his department of medical science.

SPECIAL RULES for the management of infants during the hot season, recommended by the Obstetrical Society of Philadelphia, 1874,

As worthy of special notice, we extract the last rule:

RULE II.—Do not wean the child just before or during the hot weather; nor, as a rule, until after its second summer. If suckling disagrees with the mother, she must not wean the child, but feed it in part, out of a nursing-bottle, on such food as has been directed. However small the supply of breast-milk, provided that it agrees with the child, the mother should carefully keep it up against sickness; it alone will often save the life of a child when everything else fails. When the child is over six months old, the mother may save her strength by giving it one or two meals a day of stale-bread and milk, which should be pressed through a sieve and put into a nursing-bottle. When from eight months to a year old, it may have also one meal a day of the yolk of a fresh and rare-boiled egg, or one

of beef or mutton-broth, into which stale-bread has been crumbed. When older than this, it can have a little meat finely minced; but even then milk should be its principal food, and not such food as grown people eat.—*The Clinic*.

DESTRUCTION OF BRAIN SUBSTANCE WITHOUT FUNCTIONAL LESION.—Prof. Porta, of Pavia, gives an account (*Archivio Italiano*, November, 1873; abstr. in *Psychiatr. Centralblatt*) of the case of a man who had received an injury of the skull, causing, as nearly as could be estimated, the complete disorganization of the upper right hemisphere. In spite of this extensive lesion, no measurable psychic or sensorial disturbance was observed; and at the end of eighteen months a partial hemiplegia of the left side only, remained. This was apparently somewhat improved by electrical treatment.

The same author reports another case of the *post-mortem* of a woman who had died of fever, without stupor, somnolence, or delirium, in whom the whole right side of the brain was found disorganized by suppuration, the only parts remaining intact being the cerebellum, the pons, the crus cerebelli, and the intraventricular portion.

From these facts Prof. Porta holds that the brain is a double organ, consisting of two similar halves, one of which can do the duty of both; that is, that it is, physiologically, as well as anatomically, double.—*Chicago Jour. of Nervous and Mental Disease*.

Book Reviews.

ANNOUNCEMENT.—At the request of Dr. H. von Ziemssen, Professor of Clinical Medicine at Er-

langen, a number of the most eminent clinical instructors of Germany have undertaken to prepare, in a series of

independent treatises, a complete *Encyclopædia of the Practice of Medicine*; the incentive to this labor is the great need which has been felt the past year or two of a work, which fully corresponded to the present standpoint of clinical medicine. This Encyclopædia will embrace the entire range of Special Pathology and Therapeutics, and will be completed in fifteen volumes, large octavo, of from 500 to 700 pages each. The list of contents of each volume, gives the names of the authors and the special departments which they have undertaken. While the work of each writer will bear the stamp of individuality, there will be an effort made to give to each subject the prominence and space due to it only—that the harmony of the entire work may be preserved. It is designed that the Encyclopædia shall be, par excellence, a Practical Handbook for Physicians; and for this reason especial attention has been given to clear and systematic arrangement.

For the value of the whole work, as well as the separate departments, the names of the writers are a sufficient guarantee. Each volume will have a full and carefully prepared index.

Messrs. Wm. Wood & Co. announce that they will publish by *Subscription* a translation of this work. The translating will be done by professional gentlemen, many of them former students of the writers of the different treatises, under the supervision of a responsible chief. Great care will be taken with the mechanical execution of the volume. The type will be large and clear, the paper fine, and the engravings electrotypes

of the originals. It is proposed to publish three to four volumes a year, at, as nearly as possible, regular intervals, in order to distribute the cost of subscription equally over about four years.

Terms of subscription, payable upon the delivery of each volume: Fifteen volumes, octavo, muslin binding, per vol., \$5.00; fifteen volumes, octavo, leather binding, per volume, \$6.00; fifteen volumes, octavo, half morocco binding, per vol., \$7.50.

A circular, giving the names of the authors, and the table of contents of each volume, can be had on application to the publishers.

CHICAGO JOURNAL OF NERVOUS AND MENTAL DISEASE.—The second number of this valuable new journal has been received. It is considerably larger than the first number, containing 156 pages. The original contents includes the second lecture on the "Pathology of the Vaso-Motor Nervous System," by J. S. Jewell, M. D.; "Mechanism of Reflex Nervous Action in Normal Respiration," by Prof. Austin Flint, Jr., M.D., with Remarks by Prof. J. C. Dalton, M.D.; "Speech as a Reflex Act—The Phono-Motor Nervous Centre," by Dr. E. Onimus; "Some Remarks on the Theory of Inhibitory or Reflex Paralysis," by C. Handfield Jones, M.B., F.R.S.; "Notes of some Recent Cases of Deafness, following Cerebro-Spinal Meningitis," by Samuel J. Jones, A.M., M.D.; "A Case of Chorea—A New Method of Treatment Suggested," by Prof. Ransom Dexter, M.D., and "Nervous Sore Throat." The Periscope contains a full, complete summary of progress in the study of

the Anatomy and Physiology, the Pathology, and the Therapeutics of the Nervous System—gleaned from a wide field of home and foreign journals.

ARCHIVES OF ELECTROLOGY AND NEUROLOGY.—The Contents of the first No. of this semi-annual journal is as follows: "Electrolysis and Croton Chloral," by Julius Althaus, M.D., of London; "Case of Complete Paralysis of one Recurrent Laryngeal Nerve," by F. I. Knight, M.D., of Boston; "Cataleptiform Paraplegia," by Prof. Moritz Benedict, M.D., of Vienna; "The Nature of Electricity," by Prof. Henry T. Eddy, of Princeton College; "Electrolysis in the Treatment of Strictures of the Urethra," by Robert Newman, M.D., of New York; "A Case of Hysterical Hemiplegia," by Prof. J. L. Cabell, M.D., University of Virginia; "Tinnitus Aurium treated by the Galvanic Current," by T. F. Rumbold, M.D., of St. Louis; "Hysteria and Spinal Irritation treated by Central Galvanization," by W. F. Hutchinson, M.D., of Providence, R. I.; "Some Recent Investigations into the Functions of the Human Brain," by Prof. Roberts Bartholow, M.D., of Cincinnati; "A New Method of Treating Malignant Tumors by Electrolyzing the Base," by George M. Beard, M.D.; "Case of Scirrhus of the Rectum treated by Electrolysis, with Remarks," by Prof. A. B. Crosby, M.D., of New York; "Experimental Researches in the Physiology of the Brain," by George M. Beard, M.D.; "Complete Hemiplegia followed by Rapid Recovery—Probable Embolus," by Prof. Samuel G. Armor, M.D., of Brooklyn; "Medical Jurisprudence and the Medico-

Legal Society of New York," by Clark Bell, Esq., of New York; "The Cabinet Battery," by Geo. M. Beard, M.D.; Gleanings from Foreign Journals; Reviews of Althaus, Byrne, and Arthius; New York Society of Neurology and Electrology; The New York Neurological Society, etc.

THE AMERICAN JOURNAL OF OBSTETRICS.—With the present number of this journal, which commences the seventh volume, Dr. B. F. Dawson, by whom it has been so ably edited since its foundation, retires from its management. Dr. Paul F. Munde succeeds to the editorial charge.

As now issued by Messrs. Wm. Wood & Co., the journal has been increased in size so as to give about thirty pages additional reading matter.

Dr. Dawson, in his farewell editorial, states that, "although no longer connected with the *Journal*, I shall watch its future with paternal interest, and it will always be my pleasure to do whatever may help to increase its usefulness and further its interests." To this end Dr. Dawson offers an annual prize of \$150, gold, for the best essay on some subject to be announced at the beginning of each year. The subject for the present year, as announced, is *Congenital Deformities, and Diseases depending on Maladies of the Uterus or Membranes*. The competing essays to be sent to the publishers, Wm. Wood & Co., on or before April 15th, 1875.

CORRECTION.—In the article by F. K. Bailey, in May 1st No. EXAMINER, page 211, fourteenth line from bottom of second column, instead of *my* read *very*.